

The 600 block of East Duffy Street is a narrow, dead-end road that sits in the heart of "Area C," a midtown neighborhood generally considered the poorest and most violent part of Savannah.

But Brown, known as Tony to friends, wasn't the type of man to walk away from a threat in a hostile environment, relatives said.

"I look at him as a hero, Steward said. "A lot of * * * men, they wouldn't have gotten involved."

Brown's wife, Jacqueline Steward, said Brown had just been hired as a bricklayer here in Savannah, and he had a strong work ethic.

"He was the type of person, he didn't bother with nobody," she said. "He didn't hang out on the street or sell drugs, or anything like that."

DIABETES RESEARCH

HON. ROBERT C. SCOTT

OF VIRGINIA

IN THE HOUSE OF REPRESENTATIVES

Thursday, September 26, 1996

Mr. SCOTT. Mr. Speaker, recently at a special session of the Congressional Black Caucus, members learned about the devastating impact of diabetes in the African-American community. I wanted to share with my colleagues the exciting research underway at the Diabetes Institute in Norfolk, VA. The work being done there holds out the hope that we can actually discover a cure for this disease and I believe we must do all we can to support efforts that have this much promise. Mr. Speaker, I ask unanimous consent that the attached article from the Virginia-Pilot be printed in the CONGRESSIONAL RECORD.

[The Virginia-Pilot, Tuesday, July 9, 1996]

A RESEARCH GAMBLE

(By Marie Joyce)

Someday, Dr. Aaron I. Vinik may be able to say that he and his colleagues helped cure diabetes, through work they did at the Diabetes Institutes at Norfolk's Eastern Virginia Medical School.

Someday.

Right now, Vinik, his staff and the medical school are taking a high-stakes gamble.

Medical research is expensive.

The payoff isn't guaranteed.

Other scientists around the world are chasing the same type of cure and hoping to get there first.

Because fund-raising efforts have fallen short and grants are hard to come by, money matters now loom almost as large as scientific questions at the institutes.

If Vinik's project succeeds, it could help millions of diabetes sufferers, and bring glory and money to the relatively new medical school and to Hampton Roads. If it fails—despite years of effort and millions of dollars—most people probably will never know about it.

The public hears only about the great discoveries, said Jock R. Wheeler, the school's dean.

"There are many more scientists who work their entire lifetimes and never gain recognition or the goals they've set for themselves," he said. "That doesn't mean they've been unsuccessful."

A scientist who cures diabetes would improve the lives of millions in the United States alone.

Diabetes happens because the body either can't make or can't properly use insulin, a hormone that helps process sugar and other carbohydrates.

It has been diagnosed in 8 million Americans, and some health officials estimate as many as 8 million more have the disease but don't know it. In 1992, diabetes contributed to the deaths of at least 170,000 people in the United States, according to the Centers for Disease Control and Prevention. It can lead to blindness, heart disease, stroke, kidney failure and nerve damage.

Vinik and his staff say they have taken a big step toward a possible cure. Working with collaborators at McGill University in Montreal, they've discovered a mix of proteins that spurs the body to grow more insulin-producing cells, Vinik says.

The researchers have experimented with a mix of proteins that cures the disease in hamsters, that were given a chemical to make them diabetic, Vinik said. The scientists do much of their work in a building on Brambleton Avenue, across from the medical school's main buildings.

The human body grows insulin-producing cells, located at the pancreas, before birth. After birth, the body doesn't create many more of these cells.

But in people with diabetes, the process malfunctions. With type 1 diabetes—which accounts for only about 5 percent of all cases—the body apparently attacks and kills its own insulin-producing cells. With type 2, either the body can't efficiently use the insulin or the cells can't make enough; sometimes, the cells die under the strain.

Vinik and his colleagues are trying to reverse the ability the body had before birth, prompting it to grow more insulin-producing cells.

To do that, they must accomplish two things:

They must find a specific gene that acts as a blueprint, telling the body to create the protein. Or they must isolate the specific protein created by the gene.

They must find other substances that shut off the process once enough insulin-producing cells have been created.

Potentially, Vinik says, the discovery could help all type 1 sufferers and the 15 percent or so of type 2 victims who lose their insulin-producing cells.

If they can accomplish all this in animals, they probably can do it in humans, too, Vinik said. Right now, the key is finding the blueprint gene in hamsters.

No one at the medical school will disclose how close—or how far—they are. They must be careful, they say, not to reveal too much to rival scientists.

"One never knows until the last minute, until the last experiment was done," said Dr. Leon-Paul Georges, director of the institutes. "It's a tremendous gamble, in a way."

For the last 7 years or so, the medical school and Hampton Roads contributors have been putting their money on the table to fund this research.

The institutes run a large patient-care clinic and education programs. Vinik, who had earned an international reputation at the University of Michigan Medical School and elsewhere, arrived to head the research division in 1990. A new laboratory opened that fall, after a foundation fund-raising campaign brought in \$11.5 million in less than four years.

Georges remembers a day when he and Vinik ordered a million dollars worth of sophisticated diagnostic equipment and supplies.

Since then, there have been up years and down years with fund raising, said Georges.

The last year or so has been down. Last week, the research division dropped 10 jobs, almost half of its 25-person staff, although none of the researchers worked on Vinik's key project. They're also scaling back on supplies and equipment purchases. The patient care and education departments weren't affected.

The Diabetes Institutes Foundation, the Norfolk-based, non-profit group that finds money for the institutes, collected about \$700,000 less than it hoped to in the 1994-95 fiscal year, according to the foundation's tax forms. The foundation began that year about \$700,000 behind for a combined shortfall of about \$1.4 million.

The foundation's board is composed mostly of community volunteers. Georges, who sits on the board, said that despite members' hard work, it simply wasn't possible to raise as much as they had hoped. They were able to raise about \$800,000 for the institutes in the 1994-95 fiscal year, according to tax documents.

The medical school had been making up the difference between what was budgeted and what was raised. The foundation intends to repay the money, but so far hasn't been able to, Georges said.

This year, the medical school's and institutes' board members decided the school couldn't fill the gap anymore.

With less money, Vinik says, the institute must look to other funding sources to continue at the same pace. And success may depend on speed. More than a half-dozen other centers around the world are investigating the same type of treatment.

Wheeler, the medical school's dean, won't say whether he thinks the work will go more slowly now. He said the board still backs Vinik's project. "We think the diabetes program has been very successful and we think it will continue to be very successful," Wheeler said.

But the foundation and the medical school—like institutions around the country—have been hurt by a shrinking pot of research and education money from the government and private groups, say school officials.

"The decisions in medical schools are very difficult right now," Wheeler said.

The Diabetes Institutes will continue with other major research projects, although they may have to cut back on some less important investigations.

Among other things, the institutes are participating in a study of a medicine that reverses some diabetes-related nerve damage. A major biotechnology company is funding some of that work. The project has attracted a lot of attention and brought in patients and donations from around the country.

As for the project on growing insulin-producing cells, the institutes will look for other sources of money, said Vinik. They will seek more collaborators at other schools, who would take on some of the work in exchange for some of the benefits.

Biomedical companies may be willing to bankroll the work because they expect it to pay off. Georges and Vinik say they have spoken with several major firms, which have signed agreements to examine the research without divulging it.

Research spending is always a bit of a wild card investment, even through school administrators look hard at the science before they spend the money.

"I can't say, I have this project, and if I spend this amount of money, I'm going to get this result," Wheeler said. "You have to understand—that's what research is all about. You're looking for new ideas. . . . You may not discover the fountain of youth."